REPORT OF THE CIVIL AERONAUTICS BOARD on the Investigation of an Accident Involving Aircraft During a Cross-Country Charter Flight

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Edward Gould Moore was fatally injured in an accident which occurred on the North Fork of Salcha River, Alaska, (approximately 70 miles east of Fairbanks) between 1:26 p.m. and 1:30 p.m. on November 14, 1943. Moore held a commercial pilot certificate with a single-engine land, 80-250 h.p. rating. He had flown approximately 1000 solo hours, 118 of which were in the type airplane involved. The aircraft, a Cessna C-34, NC 16408, owned by Wien Alaska Airlines, Inc., was demolished.

Due to unavailability of an air safety investigator of the Civil Aeronautics Board in the Territory of Alaska, an investigation at the scene of the accident was conducted by a Civil Aeronautics Administration inspector. Accordingly, from the information furnished by the Civil Aeronautics Administration, the Board now makes its report as follows:

Pilot Moore departed from Fairbanks. Alaska on the morning of November 14 for a cross-country charter flight to Eagle, Alaska, 188 miles away. About 1:26 p.m., while he was returning to Fairbanks, the pilot contacted the Fairbanks radio station and reported that he was over the head waters of the Chena River at 6000 feet: that the engine was turning over only 600 r.p.m., and he was making a forced landing. A company pilot took off from Fairbanks shortly thereafter to search for Moore's plane, but was unable to locate it. The following day the aerial search was continued by company and Army pilots but they too were unsuccessful. On November 16 William Hautala, a company pilot, flew to Eagle to determine Pilot Moore's time of departure, then retraced Moore's return course to Fairbanks and readily located the plane on the North Fork of the Salcha River in a wrecked condition. He was unable to land in the vicinity of the wreckage and returned to Fairbanks. On November 18, another company pilot, accompanied by a mechanic, flew to, and landed about 12 miles from the scene of the accident. They walked the remainder of the way and ascertained that Moore had been killed instantly. Due to prolonged mild temperature, further investigation of the accident was delayed until freezing weather, and a CAA inspector arrived at the scene on January 7, 1944.

Evidence indicated that the pilot had undershot his selected landing area, a creek bed, and the left wing struck a tree about 40 feet above the ground.

Examination of the wreckage revealed no evidence of failure of any part of the aircraft prior to impact. The fuel tanks were empty and there was no indication that any fuel had drained from the fuel lines. Company personnel were reasonably certain that Moore had only a 3-hour fuel supply (24 gallons) for a round trip of 376 miles, which usually requires about 3 hours and 40 minutes flying time at an average cruising speed of 105 m.p.h.

It is the established policy of Wien Alaska Airlines during cold weather to fill all tanks to capacity when airplanes return from a trip. However, when the subject aircraft returned from a  $l_2^{\frac{1}{2}}$  hour flight on the day preceding the accident the fuel dispensing system was not functioning and the plane was not refueled at the usual time. Through an oversight, neither the mechanic

in charge nor Pilot Moore checked the fuel supply prior to the take-off for Eagle. Although it seems inconceivable that any pilot would neglect to check his fuel by one means or another, either prior to or sometime during flight, all known facts lead to the conclusion that that happened in this instance. According to airport personnel at Fairbanks, Moore had always taken off with fuel tanks filled to capacity on previous flights for this company and he had evidently developed the habit of assuming his fuel supply to be sufficient without checking.

The terrain in the vicinity of the accident is mountainous and wooded, with 6000-foot ridges crossing the flight course. When power was lost the pilot had no alternative but to attempt a landing in the best available spot, which was the creek bed.

This accident was due to the pilot's negligence in departing on a flight with insufficient fuel to complete the trip, necessitating a forced landing on unsuitable terrain.

BY THE BOARD

/s/ Fred A. Toombs
Secretary